Algebra 1   Name_____

One-variable Inequality Word Problems   Period_____

1) Elisa won 40 lollipops playing basketball at the school fair. She gave two to every student in her math class. She has at least 7 lollipops left.

   a) Write an inequality to represent the situation. Be sure to define your variable.

   b) Solve the inequality to find the maximum number of students in her class.

2) More than 450 students went on a field trip. Ten buses were filled and 5 more students traveled in a car.

   a) Write an inequality to represent the situation. Be sure to define your variable.

   b) Solve the inequality to find the minimum number of people on each bus.

3) Bill spent less than $26 on a magazine and five composition books. The magazine cost $4.

   a) Write an inequality to represent the situation. Be sure to define your variable.

   b) Solve the inequality to find the maximum cost of each composition book.

4) Amanda rented a bike from Shawna's Bikes. They charged her $2 per hour, plus a $10 fee. Amanda paid less than $27.

   a) Write an inequality to represent the situation. Be sure to define your variable.

   b) Solve the inequality to find the maximum number of hours Amanda rented the bike.

5) You need to buy some pencils and an eraser. You can spend no more than $5. The eraser costs $1 and the pencils cost $0.25 each.

a) Write an inequality to represent the situation. Be sure to define your variable.

b) Solve the inequality to find the maximum number of pencils you can buy.

6) Mark's Canoes rents canoes for $20 plus $35 per hour. You do not want to spend more than $150. For how many hours can you afford to rent the canoe?

a) Write an inequality to represent the situation. Be sure to define your variable.

b) Solve the inequality and answer the question.

7) For a field trip 18 students rode in cars and the rest filled five buses. How many students were in each bus if no more than 250 students went on the trip?

a) Write an inequality to represent the situation. Be sure to define your variable.

b) Solve the inequality and answer the question.

8) Charles is saving $5 each week. He earns an extra $15 by mowing his neighbor's lawn. How many weeks will he need to save in order to have at least $75?

a) Write an inequality to represent the situation. Be sure to define your variable.

b) Solve the inequality and answer the question.